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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,032	10/15/2003	Nancy J. Tolan	05918-322001	2173
26161	7590	11/30/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			RODRIGUEZ, RUTH C	
			ART UNIT	PAPER NUMBER

3677

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,032	<b>Applicant(s)</b> TOLAN ET AL.	
	<b>Examiner</b> Ruth C. Rodriguez	<b>Art Unit</b> 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-20, 24-37 and 41-54 is/are rejected.
- 7) ☒ Claim(s) 4-6, 21-23 and 38-40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

✓

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 7-20, 24-37 and 41-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kingsford et al. (US 6,851,161 B2) in view of Provost et al. (US 4,984,339).

Kingsford discloses a releasable touch fastener (10) comprising a loop component (12) and a hook component (14). The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The touch fastener has an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). Kingsford further comprises a male seal profile portion (22,74,94) that engages a female seal profile portion (20,70,90). Kingsford fails to disclose that the releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch

Art Unit: 3677

of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials illustrated). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hook and loop components having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost and will help to retain some tension necessary to create some compression between the male and female seal profile portions to create a better seal for the closure (C. 4, L. 61-67 and C. 5, L. 1).

Provost also teaches that:

- The hook and loop components provide an Initial Peel Resistance of at least 0.5 pounds per inch of closure width (Table III for all materials illustrated).
- The hook and loop components provide an Initial Shear Resistance of at least 10 pounds per square inch (Table III for all materials illustrated).
- The hook base comprises a sheet of resin and the male fastener elements have stems extending contiguously from the sheet of resin (Figs. 11-25).

- The male fastener elements have molded crooks (Figs. 11-25).
- The fastener elements are arranged in a density of 350 fastener elements per square inch of the base (C. 9, L. 61-67).
- The stems have opposing surfaces defined by severed resin (Figs. 11-25).
- The Final Peel Resistance is at least 0.4 pound per inch of closure width (Table III for all materials illustrated).
- The Final Peel Resistance is at least 0.5 pound per inch of closure width (Table III for all materials illustrated).

Kingsford and Provost fail to disclose that each male fastener elements has two crooks extending in opposite directions along the hook base. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have each male fastener elements has two crooks extending in opposite directions along the hook base because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford and Provost disclose the details of the hook component. Kingsford and Provost fail to disclose that the loop component comprises a woven fabric. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a woven fabric because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Kingsford also discloses that:

- The Engaged Thickness is less than 0.10 inch (C. 3, L. 63-65).
- The Engaged Thickness is less than 0.09 inch (C. 3, L. 63-65).

- The Engaged Thickness is less than 0.08 inch (C. 3, L. 63-65).

For claim 19, a combination of rejections of claims 1 and 2 will result in the limitations of claim 19 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Provost also teaches that:

- The Initial Peel Resistance is at least 0.6 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.69 pound per inch of closure width (Table III for all materials illustrated).
- The Initial Peel Resistance is at least 0.8 pound per inch of closure width (Table III for all materials illustrated).

For claim 37, a combination of rejections of claims 1 and 3 will result in the limitations of claim 37 without taking into consideration the Final Peel Resistance of at least 0.3 pound per inch of closure width.

Kingsford and Provost fail to disclose that hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a hook base includes a fabric backing laminated to a side of the hook base opposite the fastener elements because the Examiner takes Official Notice that the use of loop components having woven fabric is well known in the art.

Provost also discloses that:

- The Initial Shear Resistance is at least 15 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 20 pound per square inch (Table III for most of the materials illustrated).
- The Initial Shear Resistance is at least 25 pound per square inch (Table III for most of the materials illustrated).

Kingsford discloses a method of releasably fastening two flexible surfaces (12,14). The method comprises the steps of : (a)securing a loop component to one of the surfaces. The loop component has a sheet-form loop base and an array of female fastener elements (16) extending from the loop base. (b) securing a hook component to the other of the surfaces. The hook component has a sheet-form base and an array of male fastener elements (18) extending from the base and releasably engaging the female fastener elements of the loop component (Figs. 1, 1A and 3-7). The hook and loop components have an engaged thickness of less than about 0.11 inch (C. 3, L. 63-65). (c) bringing the hook and loop components together in mating engagement (Figs. 1, 1a and 5-7). Kingsford fails to disclose that the prior art releasable touch fastener has hook and loop components provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width. However, Provost teaches a releasable touch fastener comprising a loop component (48,50) and a hook component (20). The loop component has a sheet-form loop base (48) and an array of female fastener elements (50) extending from the loop base. The hook component has a sheet-form base (24) and an array of male fastener elements (22) extending from the base and releasably engaging

the female fastener elements of the loop component (Figs. 17-24). The hook and loop components are provided with a Final Peel Resistance of at least 0.3 pounds per inch of closure width (Table III for all materials illustrated). ). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a releasable touch fastener provided with at least 0.3 pounds per inch of closure width as taught by Provost in the fastener disclosed by Kingsford since hook and loop components having at least 0.3 pounds per inch of closure width are well known in the art as taught by Provost and will help to retain some tension necessary to create some compression between the male and female seal profile portions to create a better seal for the closure (C. 4, L. 61-67 and C. 5, L. 1)..

### ***Allowable Subject Matter***

3. Claims 4-6, 21-23 and 38-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

4. Applicant's arguments filed 9 September 2005 have been fully considered but they are not persuasive.



5. The Applicant argues that the combination of Kingsford and Provost will not meet the claim limitations. The Examiner fails to be persuaded by this argument.

6. The Applicant supports his position by pointing out that the hooks of Provost by itself will not provide the necessary peel resistance. The Examiner has corrected the Office Action to reflect that the hook and loop components of Kingsford are being replaced with the hook and loop components of Provost since Kingsford fails to provide any details of the properties provided by the hook and loop components.

7. Another argument provided by the Applicant is "Provost does not even describe the type of loop material used in his closure, nor is it clear that the peel disclosed by Provost corresponds to either Initial Peel Resistance or Final Peel Resistance, as used in the Applicant's claims". This argument fails to persuade. The Examiner acknowledges that Provost fails to describe its loop material in detail, however, the claim limitations are being met because the claims are directed to the properties provided by the combination of the loop and hook components and not only to the properties of the loop component by itself. In the case of the claims where certain particular properties of the loop component are being claimed, the Examiner relies on the fact that having loop components with the general properties being claimed are well known in the art. Regarding to whether Provost discloses Initial Peel Resistance or Final Peel Resistance, the Examiner points out that the combination of Kingsford and Provost does not only rely on the properties of the hook and loop component disclosed by Provost but will also have to take into consideration that the sealing component of Kingsford will provide additional resistance to peel and therefore the Peel Resistance

obtained by the combination of the sealing component of Kingsford and the hook and loop component of Provost will meet the claim limitations.

8. The Applicant also argues that Provost fails to disclose that the hook and loop component is being used in a low profile closure. The Examiner fails to be persuaded by this argument because it is well known in the hook and loop components art to use the component in low profile closures. Additionally, the Examiner is relying in the disclosure of Kingsford for the low profile closure having the necessary engaged thickness being claimed.

9. The next argument presented by the Applicant is that Kingsford does not provide any suggestion or motivation for the combination with Provost. This argument fails to be persuasive. The Applicant acknowledges that "Kingsford describes that using the hook and loop fasteners elements in combination with a seal can be advantages in that engagement of the hook and loop elements reduce the likelihood of unwanted opening of the closure (see e.g. col. 4, lines 15-33)". Additionally, the Applicant emphasizes that Kingsford does not disclose the need for a strong closure and does not provide any information for the peel strength. As stated by the Applicant, the combination of a seal with hook and loop elements is being provided to reduce separation of the closure and Kingsford also disclose that providing the hook and loop elements also helps to retain some tension necessary to create some compression between the male and female seal profile portions to create a better seal for the closure (C. 4, L. 61-67 and C. 5, L. 1). Therefore, providing the hook and loop components provides shear resistance and the

added peel resistance will help to create a better seal throughout the closure since it creates compression between the sealing components.

10. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

11. The Applicant also argues that Kingsford in view of Provost fails to provide an engaged thickness of less than about 0.11 inches in combination with an initial shear resistance of at least 10 pounds per square inch. This argument fails to persuade because it is clear from Table III of Provost that the shear resistance between the hook and loop components is at least 12.3 pounds per square inches and therefore it meet the limitations of claim 37.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nestergard (US 4,894,060), Wood et al. (US 4,973,326), Martin et al. (US 2002/0042601 A1) and Vanbenschoten et al. (US 2003/0121128 A1) are cited to show state of the art with respect to touch fasteners having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3677


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez  
Patent Examiner  
Art Unit 3677

RLR  
rcr

November 27, 2005

  
**JJ Swann**  
Supervisory Patent Examiner  
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